

## Some Asilidae (Diptera)

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This paper describes two new genera from South America and several new species of robber flies from the Australian fauna, collected by the author in 1953-54.

### **Saropogon nigritarsus** new species

A small species characterized by the brown wings, the black triangles on the posterior tergites of the abdomen and the yellowish brown hypogygium. Length 10 mm.

Male. *Head*: black, the pollen greyish white with a slight brownish tint on the upper part of the occiput. The bristly hair of the upper occiput is strongly proclinate. The antennae are black with black bristles and a few white hairs at the base of the first segment. The style is cylindrical, obliquely truncate at the apex, with central spines. Bristles of face weak and slender, confined to the lower fifth, and white. Palpi and proboscis black. Bristles of vertex and front black.

*Thorax*: black with light yellowish brown pollen. There are four indistinct black stripes on the mesonotum, with reddish pollen and shining in color. The submedial pair of stripes are very narrowly separated and extend from the anterior margin as far back as the anterior edge of the postcalli, where they end in front of the scutellum, as a V-shaped wedge replaced by brownish yellow pollen or micropubescence. Scutellum black with similar pubescence. Bristles of the mesonotum quite weak and slender. The complement consists of two to three on the notopleura, one of them yellow, the remainder black; one long yellow, slender bristle on the supra-alar region and several long fine black hairs; one brown bristle on the postcalli, scutellar margin with three or four pair of long slender reddish or brownish yellow bristly hairs. There is a distinct row of bristly acrostical hairs and of longer dorsocentrals, increasing in length posteriorly. Halteres brownish cream color, darker at the base and unusually large.

*Legs:* anterior femora wholly brownish yellow, the middle pair similar in color with a slender black stripe beginning at the apex and extending at the apex from the middle of the anterior surface to the middle of the dorsal surface, becoming more slender and running narrowly along the anterodorsal border, nearly to the base. The hind femora are gradually swollen distally, shining black on the lateral surface, except at the immediate base; the black extends on the distal half over the whole dorsal surface and extends onto the lateral half of the ventral surface. Also, near the middle of these femora the black color gradually extends over the whole ventral surface. The anterior tibiae are wholly brownish yellow, the middle tibiae similar, with the apex narrowly black. The hind tibiae are yellow with not quite the apical half black. Apex of anterior tibiae with a slender, sigmoid spur, their basitarsi with five or six black denticles but no swelling. The anterior basitarsi are yellow, the apex black; base of the second anterior tarsal segment yellowish brown; the remaining segments and the other tarsi black. Claws slender, black, and extreme base yellowish. Bristles and pile of legs yellowish white. The posterior femora have six lateral bristles.

*Wings:* broad, uniformly tinged with medium sepia brown, the veins of the same color except for the portions of radius and subcosta, which lie before the humeral cross vein and which are more yellowish. The posterior cells and the anal cell are widely open; fourth posterior cell narrowed to slightly less than half its maximal width. The anterior cross vein is located slightly before the middle of the discal cell.

*Abdomen:* shining black, with pale golden reflections, the sides of all of the segments brownish yellow, narrowly on the first three tergites, more extensively on the remainder. On the fourth and fifth tergites the central black figure is in more or less the shape of an hour glass; on the remaining tergites the figure is a medial triangle posteriorly extended along the posterior margin, or as a medial vitta posteriorly merged with a laterally attenuate fascia. Hypopygium light yellowish brown with a narrow apical and dorsal black wedge on the superior plate, which is undivided and has a lateral posterior extension

on each side and also has a small, short, basal vitta on the ventral plate. Aedeagus and the protuberances of the ventral plate black; ventral plate basally swollen.

Female. Similar to the male, the fifth tergite with an hour-glass, black spot, the sixth with median vitta and conjoined, posterior, obtuse, triangular fascia, reaching to the base medially. The eighth tergite has the basal half in the middle yellowish brown, gradually extending to the whole length of the segment laterally. Spines of the acanthophorites wholly reddish brown. Abdominal pile yellowish white.

*Type* male, and *allotype* female: Canberra, AUSTRALIA, November 1-10, 1953, F. M. Hull collector. *Paratypes*: males 78, females 51, ranging from November 20-30, 1953 to December 1-10, 1953, collected by F. M. Hull.

### **Saropogon flavofacialis** new species

A black and reddish brown species characterized by pale golden brown pollen on the face, medium brown wings, reddish legs, disproportionate size between the sexes. The abdomen of the female chiefly reddish. Length of males 11 mm.; of females 16 mm.

Male. *Head*: occiput and vertex and most of the front black in ground color; occipital pollen greyish white, pollen of vertex and front reddish to golden brown, and immediately above the antennae pale brownish yellow. Whole face and cheeks are brownish yellow except the orbital crease which is pale brownish yellow and covered with similar colored pollen. Face apilose, with four pairs of long, slender, brownish yellow bristles above the oral margin. The palpi are yellow with bristly hairs of the same color and several darker hairs. Proboscis black, yellow ventrally on the basal half. The extreme lower occiput is yellow. The first two antennal segments are yellow with black bristles. The third segment is yellowish brown on the basal half, quite dark brown distally, with the two colors divided obliquely; apex of this segment without a differentiated micro-segment, but darker in color, obliquely truncate with a central spine. The upper occiput has one or two black bristles and several white bristles, all proclinate; frontal and ocellar bristles black.

*Thorax*: mesonotum black, except humeri, and with golden brown pollen and a pair of submedial stripes which are poorly outlined except from the anterior view. From dorsal view, they are bordered narrowly on the anterior third by a slender, irregular band of golden pollen; outside of this band lies a narrow opaque black vitta, which anteriorly curves backward into a hook-shaped figure outlined by golden brown pollen. Humeri reddish brown with golden brown pollen and similar pollen extends over the lateral margin of the mesonotum, to the edge of the first notopleural bristle; beyond this point the pollen is greyish white, including the pollen of the black scutellum. The mesonotum has black bristles and has a few scattered black setae located chiefly on the anterior third. There is a well developed row of acrostical black bristles and the anterior dorso-centrals are long, becoming still longer behind, but this group also includes some short bristles. Humeri with one long bristle and several setae. The mesonotal complement of bristles includes two notopleurals, one supra-alar, one postcallar and one scutellar pair of black bristles. Pleura black, only the anterior metapleura yellowish brown. Pollen of the mesopleura and narrowly on the anterior pteropleura golden brown; elsewhere greyish white. Halteres pale yellow.

*Legs*: anterior coxae light brownish yellow, rendered lighter by white pollen. The remaining coxae are light brown with white pollen. Anterior and middle femora, their tibiae and first two or three tarsal segments are light brown with perhaps a slight reddish tint. The last tarsal segment is nearly blackish. The hind femora are very slightly dilated towards the apex. The greater part of the hind femora and their tibiae have much the same color as the anterior legs, only slightly darker. The apices of the femora are black. The apical seventh of the hind tibiae is black, the apical fourth of their basitarsi and the apical half of the next two segments is black, otherwise reddish brown. All pile and bristles of legs black, except the ventral pile on the anterior tarsal segments, the first two middle tarsal segments and the base of the hind basitarsal segments where it is yellow.

*Wings*: uniformly medium brown including all of the veins. Costal setae black. All cells open including the anal cell.

Fourth posterior cell narrowed to one-third its maximal width. Lower end vein of discal cell slightly longer than the upper discal cross vein. Anterior cross vein enters the discal cell at not quite one-third of the discal cell length, measured from the distal end of this cell.

*Abdomen:* shining black with scattered fine black setae; the first tergite has one black and two pale bristles on each side. The base of the second tergite, when viewed from the rear, has a border of silvery pollen. The lateral margins of all of the tergites are pale orange to reddish brown, widening on the posterior segments. Hypopygium reddish brown laterally and below, but black above, the superior plate completely cleft at the base, but tightly overlapping.

Female. On the mesonotum, the reddish ground color of the humeri extends onto a large posteromedial adjacent spot or area as well as more obscurely over the whole lateral margin, almost to the postcalli. The postcalli themselves are very dark reddish brown in color, as are also the lateral calli of the metanotum, the metapleura and the anterior hypopleura and upper sternopleura. The halteres are rather dark brown, the humeri have two black bristles and the upper propleura have one stout black bristle. The anterior collar of the propleura has black bristles. The abdomen is wider than in the male, much less convex or cylindrical and tapering gradually from the base. First tergite black, the sides narrowly reddish. The second tergite black on the medial third or less and not reaching the posterior margin. The third tergite has a small, central, black spot on the basal half. The fourth tergite has only a trace of such spot. On the fifth tergite, near the base in the middle of the segment, there begins a posteriorly widening, continuous black vitta, which on the remaining tergites covers approximately half of the segment. Terminal spines pale brown. All pile and setae black.

*Type* male, and *allotype* female: collected 37 miles southeast of Perth, SOUTH AUSTRALIA, on the Brookton Highway, January 6, 1954, F. M. Hull collector. *Paratypes:* males 3 and female 1, with the same data.